

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/671,593	YOKOKURA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	CURTIS B. ODOM	2611	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Amdt filed on 2/14/08.
2. ☒ The allowed claim(s) is/are 2-5 and 7.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

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| <ol style="list-style-type: none"> <li>1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)</li> <li>2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br/>Paper No./Mail Date _____</li> <li>4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br/>of Biological Material</li> </ol> | <ol style="list-style-type: none"> <li>5. <input type="checkbox"/> Notice of Informal Patent Application</li> <li>6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),<br/>Paper No./Mail Date _____</li> <li>7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment</li> <li>8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance</li> <li>9. <input type="checkbox"/> Other _____</li> </ol> |
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### EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with H. J. Staas on March 3, 2008.

The application has been amended as follows:

In claim 3, line 2, the phrase "said execution rate" is changed to "an execution rate".

In claim 5, line 2, the phrase "a divided clock signal" is changed to "an output clock signal".

In claim 5, line 3, the phrase "said divided clock signal" is changed to "said output clock signal".

In claim 5, lines 8-9, the phrase "proceeds forward/behind" is changed to "proceeds forward/recedes behind".

Claim 7 (New) A method for synchronizing a phase of an output clock signal with a phase of an input clock signal wherein said output clock signal is generated by dividing a master clock signal, comprising:

comparing the phase of said output clock signal with the phase of said input clock signal and outputting a comparison result;

detecting the comparison result from said phase comparing and outputting a signal increasing/decreasing a division number for dividing said master clock signal when the phase of said output clock signal proceeds forward/recedes behind the phase of said input clock signal;

identifying a single applied mask rate among a plurality of mask rates for masking a part of an increasing/decreasing (INC/DEC) request signal depending on a phase difference between the input clock signal and the master clock signal, wherein as the phase difference increases, the mask rate is made lower, and as the phase difference decreases, the mask rate is made higher, masking the output signal from the phase comparison result detecting depending on the identified mask rate, and outputting the masked signal; and

obtaining a divided clock signal by controlling an increasing or decreasing operation on the division number based on the outputted masked signal.

#### **EXAMINER'S STATEMENTS OF REASONS FOR ALLOWANCE**

2. The following is an examiner's statement of reasons for allowance: Claims 2-5 and 7 are allowable over prior art references because related references do not disclose all the limitations of the claims, particularly, selecting a mask rate from a plurality of mask rates to mask an increasing/decreasing request signal applied to a division operator which divides a master clock

Art Unit: 2611

signal, wherein the mask rate increases as the phase difference between an input clock signal and an output clock signal decreases and the mask rate decreases and the phase difference increases.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### *Conclusion*

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Nogawa (U. S. Patent No. 6, 154, 071) discloses masking a phase comparator signal, but does not disclose increasing or decreasing a masking rate based on the phase difference or a division operation of a master clock signal based on a masked signal.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to CURTIS B. ODOM whose telephone number is (571)272-3046. The examiner can normally be reached on Monday- Friday, 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shuwang Liu can be reached on 571-272-3036. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2611

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to read "Curtis Odom", with a long horizontal line extending to the right.

Curtis Odom  
March 5, 2008